. . .

5

Attorney Docket No.: 16869P-026700US Client Reference No.: 340000206US1

Circuit Multiplexing Method and Information Relaying Apparatus

ABSTRACT OF THE DISCLOSURE

An information network 200 extends between a first information relaying apparatus 20 and a terminal 23, which are equipped with existing circuit multiplexing modules 39. Signals from the information relaying apparatus 20 pass through additional information relaying apparatuses 21, 22, which relay signals output from the information relaying apparatus 20. The information relaying apparatuses 21, 22 associate LAN lines between the information relaying apparatus 20 and the terminal 23 into separate groups and effectively monitor these LAN lines. If a failure is detected, then all LAN lines belonging to the group of the LAN line experiencing the failure are effectively shut down. As a result, circuit multiplexers 39 in the information relaying apparatus 20 are then instructed to use a different LAN line that is not experiencing failure so that communication can continue.

PA 3156081 v1